

PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

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PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

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| <p>To:<br/>BCF LLP<br/>1100, Rene-Levesque Blvd. West<br/>25th Floor<br/>MONTREAL, Quebec<br/>Canada, H3B 5C9</p>   |  | <p><b>PCT</b><br/>WRITTEN OPINION OF THE<br/>INTERNATIONAL SEARCHING AUTHORITY<br/>(PCT Rule 43bis.1)</p>                        |  |
| <p>Applicant's or agent's file reference<br/>08400-041</p>  |  | <p>Date of mailing 06 June 2005 (06.06.2005)<br/>(day/month/year)</p> <p><b>FOR FURTHER ACTION</b><br/>See paragraph 2 below</p> |  |
| <p>International application No.<br/><b>PCT/CA2005/000339</b></p>   | <p>International filing date (day/month/year)<br/>03 March 2005 (03-03-2005)</p> | <p>Priority date (day/month/year)<br/>03 March 2004 (03-03-2004)</p>   |  |
| <p>International Patent Classification (IPC) or both national classification and IPC<br/>IPC(7): E04B 1/98, E04H 9/00, E04H 9/02</p>  |  |  |  |
| <p>Applicant<br/><b>LA CORPORATION DE L'ECOLE POLYTECHNIQUE DE MONTREAL ET AL</b></p>   |  |  |  |
| <p>1. This opinion contains indications relating to the following items :</p> <p> <input checked="" type="checkbox"/> Box No. I Basis of the opinion<br/> <input checked="" type="checkbox"/> Box No. II Priority<br/> <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability<br/> <input type="checkbox"/> Box No. IV Lack of unity of invention<br/> <input checked="" type="checkbox"/> Box No. V Reasoned statement under Rule 43bis.1(a)(I) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement<br/> <input type="checkbox"/> Box No. VI Certain documents cited<br/> <input type="checkbox"/> Box No. VII Certain defects in the international application<br/> <input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application         </p> |  |  |  |
| <p>2. <b>FURTHER ACTION</b><br/>If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.</p>   |  |  |  |
| <p>If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.</p>  |  |  |  |
| <p>For further options, see Form PCT/ISA/220.</p>   |  |  |  |
| <p>3. For further details, see notes to Form PCT/ISA/220.</p>   |  |  |  |
| <p>Name and mailing address of the ISA/CA<br/>Canadian Intellectual Property Office<br/>Place du Portage I, C114 - 1st Floor, Box PCT<br/>50 Victoria Street<br/>Gatineau, Quebec K1A 0C9<br/>Facsimile No.: 001(819)953-2476</p>   | <p>Date of completion of this opinion<br/>26 April 2005 (26-04-05)</p>           | <p>Authorized officer<br/><b>Yasmine Robert (819) 953-0838</b></p>   |  |

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Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of:

the international application in the language in which it was filed  
 a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

a sequence listing  
 table(s) related to the sequence listing

b. format of material

on paper  
 in electronic form

c. time of filing/furnishing

contained in the international application as filed.  
 filed together with the international application in electronic form  
 furnished subsequently to this Authority for the purposes of search.

3  In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statement that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

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Box No. II Priority

1.  The validity of the priority claim has not been considered because the International Searching Authority does not have in its possession a copy of the earlier application whose priority has been claimed or, where required, a translation of that earlier application. This opinion has nevertheless been established on the assumption that the relevant date (Rules 43bis.1 and 64.1) is the claimed priority date.
2.  This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary :

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|           |  |
|-----------|--|
| Box No. V | Reasoned statement under Rule 43bis.1(a)(I) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
|-----------|--|

1. Statement

|                               |                       |     |
|-------------------------------|-----------------------|-----|
| Novelty (N)                   | Claims <u>1 to 35</u> | YES |
|                               | Claims <u>none</u>    | NO  |
| Inventive step (IS)           | Claims <u>1 to 35</u> | YES |
|                               | Claims <u>none</u>    | NO  |
| Industrial applicability (IA) | Claims <u>1 to 35</u> | YES |
|                               | Claims <u>none</u>    | NO  |

2. Citations and explanations :

D1: JP 09-279695 A (SODA I. et al.) 28 October 1997 (28-10-97)  
 D2: US 20040107654 A1 (POWELL S. et al.) 10 June 2004 (10-06-04)  
 D3: JP 2003-193699 A (FUDUKA K. et al.) 9 July 2003 (09-07-03)  
 D4: US 20030205008 A1 (SRIDHARA B.) 6 November 2003 (06-11-03)

Documents D1, D2, D3 and D4, which are considered to be the most relevant state of the art for claims 1 and 35, all disclose a brace apparatus to be mounted between two portions of a structure subjected to a loading force to limit movements due to the loading force, in which the brace apparatus comprises a fixed portion to be mounted to a portion of the structure. D2 discloses another movable portion in the form of a non-rigid connection element and D4 discloses a movable portion in the form of a core that yields when subjected to a force.

No teaching in the prior art describes a tensionable assembly mounting the movable portion to the fixed portion in such a way that I) when a loading force moves the movable portion away from the fixed portion, a first abutting element on the tensionable assembly abuts a first surface of the fixed portion, and a second abutting element on the tensionable assembly abuts a first surface of the movable portion, to thereby limit movement of the movable portion away from the fixed portion; and ii) when a loading force moves the movable portion towards the fixed portion, the first abutting element on the tensionable assembly abuts a second surface of the movable portion and the second abutting element on the tensionable assembly abuts a second surface of the fixed portion to thereby limit movement of the movable portion towards the fixed portion.

The subject matter of claims 1 and 35 is therefore novel (PCT Article 33(2)) and involves an inventive step (PCT Rule 65(1)(2), PCT Article 33(3)).

Claims 2 to 34 are dependant on claim 1 and, as such, also meet the requirements of the PCT with respect to novelty and inventive step.

The subject matter of claims 1 to 35 is considered to be industrially applicable and thus fulfills the requirements of PCT Article 33(4).

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**Box No. VIII      Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Claims, 1 19, 20 and 30 do not comply with PCT Article 6. The claims contain the following terms which lack antecedents:

“the first movable element abutting surface” (claim 1, line 20)  
“said friction mechanism” (claim 19, line 25)  
“said extending members” (claim 20, line 1)  
“said slots” (claim 30, lines 5 and 8).

Claim 20 does not comply with PCT Article 6. The claims shall be clear and concise, however, statement such as “...upon movement of said fixed portion...” in claim 20 causes a lack of clarity, for the fixed portion cannot impart movement.

The description does not comply with PCT Article 6. A statement, such as found on page 34, which implies that the protection sought may be expanded to cover the “spirit” of the invention, should be removed.